

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|---------|---|---|------------------|---------|------------------|
| L1 | 16387 | (ball adj2 grid adj2 array\$1) or BGA | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 09:58 |
| L2 | 1302453 | insulat\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 09:58 |
| L3 | 1258665 | ground\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 09:59 |
| L4 | 2636220 | power | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 09:59 |
| L5 | 6444424 | (via\$1 or hole\$1 or open\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 10:00 |
| L6 | 205579 | 5 same (fill\$3) same (conduct\$3 or metal or metallic) | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 10:00 |
| L7 | 130050 | (3 same 4) same (line\$1 or layer\$1 or film\$1) | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 10:01 |
| L8 | 146800 | 2 near5 5 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 10:03 |
| L9 | 21564 | flip-chip\$1 or (flip adj chip\$1) | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 10:04 |
| L10 | 230 | 1 and 6 and 7 and 8 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 10:09 |

| | | | | | | |
|-----|-----|-----------|---|----|----|------------------|
| L11 | 155 | 9 and 10 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 10:05 |
| L12 | 75 | 10 not 11 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | OR | ON | 2005/08/08 10:35 |

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|---|----------|------------------|---------|------------------|
| L1 | 6 | ((BGA or (ball adj grid adj array)) and metal\$3 and ground\$3 and power and (insulat\$3 or dielectric) and signal and (hole\$1 or open\$3 or via\$1)).clm. | US-PGPUB | OR | ON | 2005/08/08 11:36 |